

## **ROCK EMBANKMENTS:**

**(3-16-10)**

### **Description**

Construct rock embankments in accordance with the contract at locations shown on the plans. When required, use core material where piles will be driven through embankments and as shown on the plans.

### **Materials**

Refer to Division 10 of the *Standard Specifications*:

<b>Item</b>	<b>Section</b>
Select Materials	1016
Filter Fabric for Rock Embankments, Type 2 (non-woven)	1056

Use Class VII Select Material for rock embankments. Use Class VI Select Material (standard size no. 57 stone) for core material and on top of rock embankments. Do not use woven filter fabric. Use non-woven fabric with physical properties meeting the requirements of Type 2 Engineering Fabrics in accordance with Table 1056-1 of the *Standard Specifications*. In addition, provide filter fabric with properties meeting the following requirements and minimum average roll values (MARV) as defined by ASTM D4439. For testing fabrics, a lot is defined as a single day's production.

<b>Property</b>	<b>Test Method</b>	<b>Requirement (MARV)</b>
Permittivity	ASTM D4491	0.20 sec <sup>-1</sup> min
Mass per Unit Area	ASTM D5261	4 oz/sy min

### **Construction Methods**

Construct rock embankments in accordance with the slopes, dimensions and elevations shown on the plans and Section 235 of the *Standard Specifications*. When piles will be driven through rock embankments, place rock such that there will be at least 5 ft (1.5 m) between the rock embankment and any piles. Place and grade rock so smaller pieces are uniformly distributed throughout rock embankments. Provide a uniform surface free of obstructions, debris and groups of large rocks that could cause voids within embankments. When placing rock embankments in lifts, place core material to the top of the lift elevation before placing the next lift of rock embankment.

Place and compact a 1 ft (0.3 m) thick layer of no. 57 stone on top of rock embankments and core material. Install filter fabric on top of no. 57 stone in accordance with Article 270-3 of the *Standard Specifications* before placing embankment fill material.

### **Measurement and Payment**

*Rock Embankments* and *#57 Stone* will be measured and paid for in tons (metric tons). Select material will be measured by weighing material in trucks in accordance with Article 106-7 of the *Standard Specifications*. The contract unit prices for *Rock Embankments* and *#57 Stone* will be full compensation for furnishing, hauling, handling, placing, compacting and maintaining select material.

*Filter Fabric for Rock Embankments* will be measured and paid for in square yards (meters). Filter fabric will be measured along the top surface of the no. 57 stone and no additional payment will be made for overlapping fabric. The contract unit price for *Filter Fabric for Rock Embankments* will be full compensation for supplying, transporting and installing filter fabric and wire staples.

Payment will be made under:

**Pay Item**

Rock Embankments

#57 Stone

Filter Fabric for Rock Embankments

**Pay Unit**

Ton (Metric Ton)

Ton (Metric Ton)

Square Yard (Meter)